

# Bullying and engagement among nurses

## Summary

Workplace bullying has become a growing issue among nurses, which can have a negative impact on engagement. Due to the relevance of this matter, the purpose of this study was to identify the presence of workplace bullying and engagement and to analyze the relationship between the two and the sociodemographic and professional variables among nurses.

This is a quantitative, cross-sectional and correlational study. The sample consisted of 173 primary care nurses from one of Azores' Islands (Portugal). The sample was of 88.4% female nurses; 58.4% of which 38 years old or older and with an average of 16.1 years of professional experience. A questionnaire was applied respecting the nurses' confidentiality, consisting of three groups for the nurses' sociodemographic, workplace bullying (NAQ-R) and engagement (UWES) evaluation.

Among the results, there was a prevalence of workplace bullying of 9.2%. Nurses 37 years old or younger, working a rotating shifts and with stressful work, were more exposed to workplace bullying. Good levels of engagement were identified (Mean = 4.3). Female nurses with partners and children, working fixed shifts, with 14 or more years of professional experience and who did not perceive their work stressful, presented higher levels of engagement. There was a negative relationship between workplace bullying and engagement.

The results of this study suggest the need to invest in antibullying policies / procedures and occupational health programs to minimize the impact of workplace bullying and to promote the maintenance of good levels of engagement among nurses.

KEYWORDS: BULLYING; ENGAGEMENT; NURSES; NAQ-R; UWES.

## Introduction

Workplace bullying is a psychosocial occupational risk that compromises working rights, the respect and the dignity of employees, a representative problem among nurses<sup>1,2</sup>.

Workplace bullying has been characterized as a repeated exposure to acts or negative behaviors at the workplace, at least once a week and over a period of at least 6 months<sup>3</sup>. Explanatory models of workplace bullying reveal its multifactorial nature<sup>3</sup>.

Among nurses, workplace bullying translates into harmful consequences at the physiological, emotional and social levels<sup>4</sup>.

While workplace bullying conveys a negative concept, engagement is defined as a positive affective-motivational mental state in relation to work, characterized by vigor, dedication and absorption<sup>5</sup>.

Among nurses, engagement may result in higher levels of personal initiative and motivation, well-being at work, profitability and commitment to the organization<sup>6</sup>.

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Workplace bullying and engagement can be related to each other. The antecedents and consequences of bullying can coexist as factors that reduce levels of engagement<sup>3,7</sup>. Thus, the occurrence of bullying can negatively influence levels of engagement<sup>8</sup>.

Due to the relevance of this subject and its impact on health organizations and nurses, a quantitative, cross-sectional and correlational study was developed, integrated in the Project “INT-SO [International – Occupational Health] – From contexts of work to occupational health of nursing professionals, a comparative study between Portugal, Brazil and Spain”, with the purpose of contributing to the implementation of programs that promote nurses' occupational health.

## Bullying among nurses

Workplace bullying refers to interpersonal or work-related negative acts that aim to humiliate, punish or disturb someone, occurring at least once a week for at least 6 months.<sup>3</sup> Workplace bullying occurs as a gradual process that can begin with a conflict over situations at work that may evolve into interpersonal

nal conflicts and progressively into acts of stigmatization<sup>3</sup>. The prevalence of workplace bullying in different countries has been documented. For instance, as to self-labelled prevalence, in Europe, it was established at 5%<sup>9</sup>.

Among nurses, Lee et al.<sup>10</sup> presented an explanatory model of bullying based on four main factors: the aggressor's negative acts (aimed at professional erosion, competence and reputation of the victim through interpersonal and work-related attacks); the unbalance of power between the victim and the aggressor (in which the aggressor generally presents a higher level of formal or informal power); the negative effects on the victim (physical, psychological and professional); and the duration and frequency of the negative acts of the aggressor (workplace bullying is a gradual, cumulative process over time).

Workplace bullying is an emerging problem among nurses. The ICN<sup>1</sup> stated that 25% of nurses reported bullying from supervisors or colleagues.

The occurrence of workplace bullying is multifactorial, with organizational and individual causes.<sup>3</sup> Sociodemographic and professional factors that may precede the occurrence of workplace bullying can refer to younger male nurses, with less years of professional experience, unmarried, with a lower academic degree, experiencing symptoms of anxiety, depression and fatigue, with limited autonomy at work, less commitment to the organization, less job satisfaction, working rotation shifts, with communication problems with colleagues, low social support at work, work overload and, as far as supervision, subject to an autocratic leadership<sup>4,11,12</sup>.

Workplace bullying has a negative impact, such as a decrease in morale, productivity, an increase in absenteeism (due to physical, psychological and emotional damages), an increase in turnover that compromises the safety of patients. It also results in lawsuits, loss of profitability, negative impact on the reputation of organizations, and misrepresentation of the patient's relationship with the health professional<sup>13</sup>. Additionally, it presents increased costs with training and integration of new professionals and indirect losses, such as the impoverishment of labor relations<sup>14</sup>.

### Engagement among nurses

While workplace bullying expresses a negative concept, engagement is defined as a positive affective-motivational mental state in relation to work that is characterized by vigor, dedication and absorption. Vigor is characterized by high levels of energy and mental resilience of the professional while working, willingness to invest effort at work and persistence even when facing difficulties. Dedication is characterized with the presence of meaning, enthusiasm, inspiration, pride and challenge at work. Absorption is characterized by concentration and involvement in work<sup>5</sup>.

Through the Job Demands and Resources Model (JD-R), organizational and individual antecedents of engagement can be explained<sup>7</sup>. This model, elevated to theory, explains that engagement acts as a mediator between the resources and the job demands that are its predictors and the performance, which is the result<sup>5</sup>.

According to this theory, work resources and work demands interact with each other. While job demands are the main predictors of exhaustion, work resources are the main predictors of engagement. Thus, in the presence of good work resources to meet the work demands, engagement levels tend to be higher and have a positive impact on workers' performance<sup>7</sup>.

Antecedents to engagement may include, among nurses, in terms of work resources, salary, participation in decision-making, possibilities for career advancement, variety and independence at work, learning opportunities, the perception of organizational and social support and job satis-

faction. In terms of work demands, factors such as workload, emotional and mental demands, lack of control over the work environment, ambiguity at work, rotational shift schedules, stress associated with clinical practice, burnout and uncertainty about the future, may also have a negative impact on nurses' engagement<sup>6,15</sup>.

Engagement among nurses can result in higher levels of personal initiative and motivation, profitability for organizations, well-being and commitment to the organization<sup>6</sup>.

### Bullying and engagement among nurses

Workplace bullying and engagement can be related to each other. The antecedents and consequences of bullying can coexist as factors that reduce levels of engagement<sup>3,7</sup>. Considering the JD-R model, workplace bullying is considered to be a hindrance work demand. Thus, the negative impact of bullying as well as its antecedents and consequences may negatively influence engagement levels<sup>8</sup>. Therefore, many of the factors that explain the presence of workplace bullying coexist as explanatory aspects of the decrease of workers' levels of engagement<sup>3</sup>.

In addition to this direct relationship, the presence of workplace bullying can also indirectly reduce engagement through the avoidance of basic psychological and social needs, motivation to work and autonomy<sup>16</sup>.

Studies have shown this relationship among nurses. For instance, Trépanier et al.<sup>17</sup> verified in a study with 1179 nurses that workplace bullying was positively related to burnout, but negatively related to satisfaction, autonomy and competence at work, good interpersonal relations and engagement. They also found that engagement was negatively related to burnout, but positively related to satisfaction, autonomy, work competence and good interpersonal relationships.

### Research question

The following research question was defined: what is the relationship between workplace bullying and engagement among primary health care nurses in one of Azores' Islands (Portugal)?

In order to answer the research question the subsequent aims were formulated: to identify the presence of workplace bullying and engagement among nurses; analyze the variation of workplace bullying and engagement according to nurses' sociodemographic and professional characteristics; and analyze the association between workplace bullying and engagement.

### Purpose of the study

The purpose of this study was to contribute to the research of this subject in the Azores, focusing on primary health care nurses and to the elaboration of programs that promote nurses' occupational health. These programs intend to empower nurses to prevent and minimize the consequences of workplace bullying and to catalyze work resources, meeting the requirements of the same, in order to increase their levels of engagement.

### Methods

The study was quantitative, cross-sectional and correlational.

### Population and sample

The target population consisted of nurses who worked in primary health care on an Azorean island (Portugal). The inclusion criterion defined was that the nurses would have to work for at least 6 months in the Health Institution where the questionnaire was applied. The total eligible population for inclusion in this study was of 235 nurses.

The sampling technique used was non-probabilistic. It was a convenience sample, consisting of 173 nurses, resulting in an accession rate of 73.6%.

All nurses in the sample worked in primary health care. Regarding the sociodemographic variables, the mean age was 39.6 years ( $SD = 7.7$ ), 88.4% of the nurses were female, 58.4% were 38 years of age or older, 65.9% had a partner, 72.3% were registered nurses (without postgraduate education), 70.5% had children, 49.7% did not have dependents, 49.4% had help to take care of dependents, 69.4% did not contribute exclusively to their household, but other family members also contributed, 54.3% practiced leisure activities. Regarding the professional variables, the average number of years of professional experience was 16.1 ( $SD = 7.7$ ), the average number of years of service was 10.4 years ( $SD = 7.9$ ). Additionally, 99.4% of the nurses had a permanent employment contract and 65.3% worked in fixed shifts schedules. Referring to work related stress, 79.2% of the nurses considered their work stressful.

### Data collection instrument

A questionnaire was used that included three groups, for the sociodemographic and professional assessment of nurses, for the evaluation of workplace bullying, using the Negative Acts Questionnaire – Revised (NAQ-R, 23 items), originally developed by Einarsen et al.<sup>18</sup> and adapted to Portuguese nurses by Borges et al.<sup>19</sup>, and for the evaluation of engagement, using the Utrecht Work Engagement Scale (UWES, 9 items), developed by Schaufeli et al.<sup>20</sup>

The NAQ-R allows the objective evaluation of workplace bullying using 22 items that correspond to negative acts in which the respondent is situated in relation to their frequency (from the value 1 - never, 2 - now and then, 3 - monthly, 4 - weekly, up to the value 5 - daily). Additionally, it presents a 23rd

item with a definition of workplace bullying and asks the respondent to self-report as a victim of bullying (it can be found in the following: 1 - no, 2 - yes, but only rarely, 3 - Yes, now and then, 4 - Yes, several times a week, 5 - Yes, almost daily), thus also allowing the subjective evaluation of workplace bullying.

In this study, four NAQ-R subscales were considered: Intimidation, Exclusion, Work Quality / Overload and Undervaluation of Work.

The prevalence of workplace bullying was assessed by three criteria:

1. That the respondent is located in at least one of the 22 items in the value 4 (weekly) or 5 (daily).
2. That the respondent self-reports as a victim of bullying through item 23, with 3 (yes, now and then), 4 (yes, several times a week) or 5 (yes, almost daily).
3. When responded in the first and second criteria positively<sup>21</sup>.

The UWES 9 items are based on the definition of engagement<sup>22</sup>. It includes three subscales: vigor, dedication and absorption. In each item, the respondent is asked to think about their professional tasks and evaluate how often they feel what is stated. In each item, the respondent can select one of seven levels: 0 (never), 1 (a few times a year or less), 2 (once a month or less), 3 (a few times a month), 4 (once a week), 5 (a few times a week) or 6 (every day). For the engagement evaluation, the UWES and subscales' scores can be used. Higher scores reveal greater engagement.

Regarding the NAQ-R fidelity, the Cronbach's alpha was 0.934, in the subscales of Intimidation: 0.866, Exclusion: 0.861, Work quality / overload: 0.735 and Work underestimation: 0.702.

As for the UWES fidelity, the Cronbach's alpha was 0.926, in the subscales of Vigor: 0.891, Dedication: 0.857, Absorption: 0.782. Cronbach's alpha values of both scales indicate good internal consistency<sup>23</sup>.

## Procedures and ethical aspects

The application of the questionnaire required authorization from the Board of Directors of the Health Institution as well as the nurses' informed consent. The collected data and the integrated study in the INT-SO obtained a favorable assent by the ethics committee of Porto's Nursing School. Nurses' confidentiality was guaranteed. For the treatment of descriptive and inferential statistics, the Statistical Package for the Social Sciences, version 22 was used. For the parametric tests, the t-test (*t*) was used for independent samples. Regarding non-parametric tests, the Mann-Whitney test (*U*) was used. As significance level, 0.05 ( $p < 0.05$ ) was defined. For the evaluation of the correlations between two metric variables, the Pearson correlation (*r*) was used.

## Results

In this chapter, the results obtained according to the aims of the study are presented.

### Bullying and engagement among nurses

The descriptive analysis of the results allowed to verify the distribution of the NAQ-R and subscales scores. In both, the average number of negative acts in the workplace was between 1 (never) and 2 (now and then) (table 1).

As to the prevalence of workplace bullying, the results are presented in table 2. Regarding the frequency of negative acts, when applied to criteria 1 or 3, it was verified that items 3 - Being ordered to do work below your level of competence, 4 - Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks - and 21 - Being exposed to an unmanageable workload, were more frequent (criteria 1 - 11%,  $N = 19$ , 6.9%,  $N = 12$  and 6.9%,  $N = 12$ ; and criteria 3 - 3.0%,  $N = 5$ , 3.0%,  $N = 5$  and 3.0%,  $N = 5$ , respectively).

As for engagement, the descriptive analysis of the UWES and subscales scores indicated that nurses were on average between levels 4 (once a week) and 5 (a few times a week) (table 3).

DESCRIPTIVE ANALYSIS OF NAQ-R AND SUBSCALES

1

NAQ-R	Items	N	Mean	SD	Minimum	Maximum
Intimidation	2, 8, 9, 10, 15, 19, 20, 22	173	1.2	0.4	1	5
Exclusion	1, 5, 6, 7, 12, 13, 14, 17	173	1.4	0.4	1	4
Work quality / overload	11, 16, 18, 21	173	1.5	0.5	1	4
Undervaluation of work	3, 4	173	1.6	0.9	1	5
NAQ-R	...	173	1.4	0.4	1	4

PREVALENCE OF WORKPLACE BULLYING AMONG NURSES ACCORDING TO CRITERIA 1, 2 AND 3

2

Criteria	Prevalence	
	%	N
1. That the respondent is placed in at least one of the 22 items in the value 4 (weekly) or 5 (daily)	22.0	38
2. That the respondent self-labelled as a victim of bullying through item 23, with 3 (yes, now and then), 4 (yes, several times a week) or 5 (yes, almost daily) responding	9.2	16
3. That the respondent answered in the first and second criteria positively	6.9	12

DESCRIPTIVE ANALYSIS OF THE UWES AND SUBSCALES SCORES

3

UWES	Items	N	Mean	SD	Minimum	Maximum
Vigor	1, 2, 5	172	4.3	1.4	1	6
Dedication	3, 4, 7	173	4.4	1.3	0	6
Absorption	6, 8, 9	173	4.3	1.3	0	6
UWES	...	173	4.3	1.2	1	6



**RELATIONSHIP BETWEEN BULLYING (NAQ-R) AND ENGAGEMENT (UWES) AMONG NURSES  
WITH SOCIODEMOGRAPHIC AND PROFESSIONAL VARIABLES**
**4**

NAQ-R	Age	N	Mean	SD	t(df) p
<b>Work Quality / overload</b>	≤ 37 years old	72	1.6	0.6	-2.214 (171) 0.028
	≥ 38 years old	101	1.4	0.5	
<b>Undervaluation of work</b>	≤ 37 years old	72	1.8	1	-2.214 (171) 0.029
	≥ 38 years old	101	1.5	0.8	
NAQ-R	Help to care for a dependent person	N	Mean	SD	t(df) p
<b>Undervaluation of work</b>	Yes	42	1.9	1.1	-2.174 (81) 0.033
	No	41	1.4	0.6	
NAQ-R	Workshift	N	Mean	SD	t(df) p
<b>Bullying</b>	Fixed shift	113	1.1	0.2	-3.065 (167) 0.003
	Rotating shift	56	1.4	0.6	
<b>Exclusion</b>	Fixed shift	113	1.4	0.4	-2.146 (167) 0.033
	Rotating shift	56	1.5	0.5	
<b>Work quality / overload</b>	Fixed Shift	113	1.4	0.4	-2.698 (167) 0.009
	Rotating shift	56	1.7	0.7	
<b>Undervaluation of work</b>	Fixed shift	113	1.5	0.7	-2.729 (167) 0.008
	Rotating shift	56	2	1.1	
<b>NAQ-R total</b>	Fixed shift	113	1.3	0.3	-2.909 (167) 0.005
	Rotating shift	56	1.5	0.6	
NAQ-R	Stressful work	N	Mean	SD	t(df) p
<b>Exclusion</b>	Yes	137	1.5	0.4	-2.679 (170) 0.008
	No	35	1.2	0.3	
<b>Work quality / overload</b>	Yes	137	1.6	0.6	-3.717 (170) 0.000
	No	35	1.3	0.3	
<b>NAQ-R total</b>	Yes	137	1.4	0.4	-2.430 (170) 0.016
	No	35	1.2	0.2	
UWES	Marital status	N	Mean	SD	t(df) p
<b>Dedication</b>	Without partner	58	4.1	1.3	-2.029 (170) 0.044
	With partner	114	4.6	1.3	
UWES	Children	N	Mean	SD	t(df) p
<b>Vigor</b>	Yes	121	4.5	1.2	-2.601 (170) 0.011
	No	51	3.9	1.5	
<b>Dedication</b>	Yes	122	4.6	1.2	-3.249 (171) 0.002
	No	51	3.9	1.5	
<b>Absorption</b>	Yes	122	4.5	1.2	-2.854 (171) 0.005
	No	51	3.8	1.5	
<b>UWES total</b>	Yes	122	4.5	1.1	-3.043 (171) 0.003
	No	51	3.8	1.4	
UWES	Help to care for dependent person	N	Mean	SD	t(df) p
<b>Absorption</b>	Yes	42	4.1	1.2	2.339 (81) 0.022
	No	41	4.7	1	
<b>UWES total</b>	Yes	42	4.2	1.2	2.019 (81) 0.047
	No	41	4.7	0.8	

UWES	Professional experience	N	Mean	SD	t(df) p
Absorption	≤ 13 years of age	78	4.0	1.4	-2.395 (171) 0.018
	≥ 14 years of age	95	4.5	1.2	
UWES total	≤ 13 years of age	78	4.1	1.3	-2.013 (171) 0.046
	≥ 14 years of age	95	4.5	1.1	
UWES	Workshift	N	Mean	SD	t(df) p
Vigor	Fixed shift	113	4.5	1.3	2.682 (166) 0.008
	Rotating shift	55	3.9	1.4	
Dedication	Fixed shift	113	4.6	1.2	2.408 (167) 0.017
	Rotating shift	56	4.1	1.4	
Absorption	Fixed shift	113	4.5	1.2	3.004 (167) 0.003
	Rotating shift	56	3.8	1.4	
UWES total	Fixed shift	113	4.5	1.1	2.993 (167) 0.003
	Rotating shift	56	3.9	1.3	
UWES	Stressful work	N	Mean	SD	t(df) p
Vigor	Yes	136	4.2	1.4	3.089 (169) 0.003
	No	35	4.8	0.8	
Dedication	Yes	137	4.3	1.4	3.513 (170) 0.001
	No	35	5	0.8	
Absorption	Yes	137	4.2	1.4	2.442 (170) 0.017
	No	35	4.7	1.1	
UWES total	Yes	137	4.2	1.3	3.351 (170) 0.001
	No	35	4.8	0.8	
UWES	Gender	N	Mean Rank		U p
Vigor	Male	20	53.58		861.500; 0.001
	Female	152	90.83		
Dedication	Male	20	58.02		950.500; 0.006
	Female	153	90.79		
Absorption	Male	20	46.00		710.000; 0.000
	Female	153	92.36		
UWES total	Male	20	49.58		781.500; 0.000
	Female	153	91.89		

### Relationship between workplace bullying and engagement with sociodemographic and professional variables

Regarding the comparison between means, there were no statistically significant results in the variables of gender, marital status, literacy, parenthood, responsibility over dependents, contributing exclusively with their salary, leisure activities, professional experience and seniority. As for engagement, there were no significant results in the variables of age, literacy, dependents, exclusively contributing with their salary, leisure activities and professional experience. Statistically significant results are presented in table 4.

Workplace bullying was more frequent among younger nurses ( $\leq 37$  years old), without help to care for dependents, working rotating shift schedules and who perceived stress at work.

Regarding engagement, this was higher in female nurses, with partners, with children, without help to care for dependents, with more years of pro-

fessional experience ( $\geq 14$  years of age), with fixed work shifts and without perceived stress at work.

### Relationship between bullying and engagement

All correlations between NAQ-R and UWES were negative and statistically significant, this is, the higher the workplace bullying scores, the lower the levels of engagement. The correlation between NAQ-R and UWES,  $r(173) = -0.280$ ;  $p = 0.000$  was low<sup>23</sup>. The highest correlation between

NAQ-R subscales and UWES subscales was found between Work quality / overload and Dedication  $r(173) = -0.321$ ;  $p = 0.000$  (low correlation); The lowest was found between the Exclusion and Absorption subscales  $r(173) = -0.158$ ;  $p = 0.038$  (very low correlation).

The NAQ-R Work quality / overload subscale best explains the variance in the UWES scale (9.7%), followed by Exclusion (6.0%). The subscale Dedication best explains the variance in the NAQ-R scale (10.2%), followed by Vigor (6.0%).

## Discussion

In this chapter, the discussion is made accordantly to the aims of the study.

### Bullying and engagement among nurses

The prevalence of workplace bullying found in this study related to the three prevalence criteria are comparable to those observed in other studies that used similar methodology<sup>21</sup>. Prevalence values in the self-labeling method (9.2%) were lower than the objective method (22%), indicating that many of the nurses who are subject to negative acts did not consider themselves victims of bullying. In studies with different methodology there have been discrepant prevalences<sup>24</sup>. In addition, the socio-cultural factors of the regions may also influence the prevalence<sup>9</sup>.

Studies conducted with nurses have revealed that items 3, 4 and 21, when applied to criteria 1 or 3, present high frequencies<sup>21,24</sup>. Negative acts 3, 4 and 21 are acts related to work. They are subtle, indirect and more difficult to detect, which may explain their higher frequency<sup>25</sup>. Furthermore, the results suggest that there are organizational factors that may have fostered the perception of the negative acts associated with Undervaluation of work (items 3 and 4 constitute this subscale) and Work quality / overload (item 21 belongs to this subscale). In Portugal, in recent years, nurses have invested in post-graduate training<sup>26</sup>. However, work contexts do not always make it possible to transpose competencies acquired in a training context into the clinical context, nor do nurses perceive recognition of their competencies through career or monetary means, being able to enhance the perception of negative acts associated to the undervaluation of work. In addition, the high professional demands, both for the nature of the nursing profession as well as for the work overload may have enhanced the perception of negative acts related to Work quality / overload. Nielsen et al.<sup>27</sup> in a meta-analysis found that workplace bullying often occurs in the health sector, especially among nurses due to work overload.

As for engagement, the average engagement levels and all the subscales were good. These results corroborate other studies<sup>28</sup> and may suggest that the complexity of the nursing activity maintain these professionals dedicated and highly committed.<sup>15</sup>

### Relationship between workplace bullying and engagement with sociodemographic and professional variables

The results revealed that workplace bullying was more frequent among younger nurses. This result is similar to that of other studies<sup>4,11,12</sup>. Younger nurses may be less able to manage interpersonal relationships at work and tend to deal less effectively with workplace bullying, becoming more vulnerable to its occurrence<sup>11</sup>.

Nurses without help to care for dependents perceived more acts of bullying. This may suggest that family-based nurses who do not directly assume family responsibilities may be more available for work and professional investment<sup>15</sup>, with a greater perception of negative acts associated with under-

valuation of work, when they do not see their investment matched.

Workplace bullying was more frequent among nurses working rotating shift schedules and who perceived stress at work. Other studies reveal similar results, in which shift working nurses may be more subjected to bullying due to greater unpredictability of working hours, greater emotional demands and fewer opportunities for communication and building positive interpersonal relationships at work<sup>4</sup>. Regarding the relationship between the occurrence of bullying and work stress, this can indeed be a predictor for bullying<sup>29</sup>.

Regarding engagement, this was higher in female nurses. Other studies corroborate this result<sup>15,28</sup>, which may suggest that female nurses presented greater achievement or satisfaction in their work (antecedents of engagement), fruit of the nature and identity of the profession<sup>28</sup>.

Engagement was also higher among nurses with partners, with children and without help to care for dependents, corroborating other studies<sup>15</sup>.

Favorable family-work interaction is positively related to professional achievement<sup>30</sup>. Having a partner and children can be a source of support, stimulating well-being, professional fulfillment and commitment with work, antecedents of engagement<sup>6</sup>. In contrast, nurses without help to care for a dependent person had higher means of engagement. This result may suggest that, even when facing challenges, the nurses feel enthusiastic, inspired and proud of their work, thus increasing their engagement levels.

Nurses with more years of professional experience ( $\geq 14$  years of age), with fixed work shifts and without perceived stress at work presented higher levels of engagement. Nurses with more years of professional experience (associated with being older) can assign greater meaning to the profession, have greater percep-

tion of competence in their work performance, impact on working conditions, and self-determination or autonomy, greater sense of self-efficacy and resilience, leading to higher levels of job satisfaction<sup>31</sup>. Other studies have shown that nurses with higher professional experience have higher levels of engagement<sup>28</sup>. As for the work schedule, a higher emotional requirement related to rotating shifts may explain the higher levels of engagement in nurses working fixed shifts<sup>7</sup>. As for the relationship between engagement and stress, other studies have demonstrated similar relationships<sup>8</sup>.

### **Relationship between bullying and engagement**

The correlations were negative: the higher workplace bullying scores correspond to the lower levels of engagement. In part, these results are explained by the fact that workplace bullying is a type of hindrance demand of the worker's progress<sup>8</sup>. The models JD-R<sup>7</sup> and the theoretical model for the study and management of workplace bullying<sup>3</sup> explain that many of the factors that precede the occurrence of bullying (for example, rotating shift schedules, work overload, stress at work) coexist as factors (or job demands in the JD-R model) that can decrease engagement levels. Studies with nurses<sup>4,12</sup> and with other professionals<sup>8</sup> have demonstrated this relationship directly or indirectly.

### **Conclusions**

The results obtained in this study allowed to respond to the outlined research question and aims. It was possible to identify the presence of workplace bullying and engagement levels, analyze their variation in terms of sociodemographic and professional variables and the relationship between workplace bullying and engagement. It was found that workplace bullying was prevalent and that it was more frequent in younger nurses, who have help to care for dependents, with rotating shift schedules and with perceived stress at work.

Concerning engagement, female nurses, with partners, with children, without help to care for a dependent person, with more years of professional experience, working fixed schedules and without perception of stress revealed higher levels. A negative relationship between workplace bullying and engagement was verified.

### **Study implications**

The study results translate into important implications for nurses and health organizations.

Although in recent years there has been an incentive to implement strategies to prevent psychosocial occupational risks, including in Portugal<sup>32</sup> there is still many opportunities for development and implementation of those<sup>33</sup>.

Therefore, this study suggests the need to implement intervention strategies for workplace bullying at three levels of prevention<sup>34</sup>. At a primary level, by providing continuous information and training about bullying, especially for nursing managers, and by investigating and monitoring bullying antecedents. At a secondary level, by developing anti-bullying policies / procedures that discourage its occurrence and developing nurses' occupational health programs. At a tertiary level, to equip victims and perpetrators with tools to allow them to manage the consequences of workplace bullying.

Engagement levels were considered good. However, for its maintenance and increase it is important that organizational and individual interventions be implemented. In institutions, it is fundamental that nursing managers become involved, who should view engagement as one of the core values of the organization, while promoting positive relationships in the workplace and

while giving opportunity for nurses to express their opinions. This will contribute to the development of social resources at work. It will also positively influence decision-making processes, leading to greater job satisfaction and engagement<sup>35</sup>. Furthermore, it is important to perform the diagnosis of the existing work demands and resources and the training of nurses, in order to develop skills combining work demands with work resources.



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